and hæmapophysial elements. This arch made its first appearance in every vertebrate embryo close to the occiput; and in fishes—the representatives of the embryo-state of higher vertebrata, where the principle of vegetative repetition most prevailed, and the primitive type was least obscured by teleological or adaptive modifications the scapular arch retained its true and typical connexions with the occiput.

The general homology of the locomotive members, as developments of the diverging appendages of the inferior vertebral arches, was illustrated, and the parallelism in the course of the modifications of all such appendages pointed out. As the scapular arch belongs to the skull, so its appendages, the pectoral or anterior members, were essentially parts of the same division of the skeleton segments.

As a corollary to the generalization that the vertebrate skeleton consisted of a series of essentially similar segments, was the power of tracing the corresponding parts from segment to segment in the same skeleton. The study of such "serial homologies" had been commenced by the unfortunate Vicq. d'Azyr, in his memoir "on the parallelism of the fore and hind extremities;" and similar relations could be traced through the more important elements of the series of vertebræ. Prof. Owen believed it to be an appreciation of some of these homologies that lay at the bottom of the epithets, "scapula of the head," "ilium of the head," "femur of the head," &c. applied to certain cranial bones by Oken and Spix. To Cuvier this language had seemed unintelligible jargon; yet the error consisted merely in assigning a special instead of a general name to express the serial homology rightly discerned, in some of the instances, by the acute German anatomists. "Scapula," "ilium," "rib," &c. were names indicative of particular modifications of one and the same vertebral element. Such element, understood and spoken of in a general sense, ought to have a general name. Had Oken stated that the tympanic bone of the bird, for example, was a "pleurapophysis" (or by any other equivalent term) of the head, his language would not only have been accurate, but intelligible, perhaps, to Cuvier. When Oken called it the "scapula of the head," he then unduly extended such special name, and transferred it to a particularly and differently modified pleurapophysis, which equally required to have its own specific name.

Prof. Owen dwelt on the necessity of having clearly-defined terms for distinct ideas, in order to ensure the progress of science; and alluded to the advancement of human anatomy by accurate determinations of the general type, of which man's frame was a modification. —From the Literary Gazette.

BOTANICAL SOCIETY OF EDINBURGH.

January 14, 1847.—Sir William Jardine, Bart., in the Chair.

The following communications were read :---

1. "On Fairy Rings," by Dr. George Wilson. The object of Dr. Wilson's remarks was to show that the chemical theory of the

origin of these remarkable circles, laid before the meeting of the British Association, held at Southampton in September 1846, by Professor Way of the Agricultural College at Circncester, was identical with that published by Wollaston in the 'Philosophical Transactions' for 1807. Dr. Wilson also pointed out that analyses of various fungi had been made by Professor Schlossberger of Tubingen and Dr. Doepping, and thought that these gentlemen's names deserved to be mentioned, as confirmers of Wollaston's views and predecessors of Professor Way, in establishing the probability of the chemical theory of Fairy Rings. To Professor Way, on the other hand, belonged the twofold merit of being the first to analyse Agarics actually taken from Fairy Rings, and the first to supply a detailed qualitative and quantitative analysis of the ashes of these fungi.

Dr. Balfour made remarks on the views of botanists relative to centrifugal development, and endeavoured to show that a combination of the botanical and chemical theories was necessary to account for the phænomenon.

Dr. Fleming thought that none of the theories were sufficient to account for the so-called fairy Rings in all cases; and alluded to the occurrence of fungi, especially *Agaricus oreades*, in a circular arrangement without any alteration in the grass.

Sir Wm. Jardine agreed with Dr. Fleming; and stated that the growth of fungi in lawns was often not in a circular manner, but of various forms, and without altering the appearance of the grass. He then briefly noticed the points which still required determination, and urged upon botanists the importance of attending to them.

2. Supplement to "A Synopsis of British Rubi," No. 2, by Charles C. Babington, M.A. See 'Annals,' p. 83 of the present volume.

MISCELLANEOUS.

Description of a new genus and species of Entozoa. By JOSEPH LEIDY, M.D.

In the course of an investigation of the anatomical structure of the terrestrial Gasteropoda of the United States, I discovered a microscopic Entozoon inhabiting the fluid contained in the vessie copulatrice or spermatheca of *Helix albolabris*, since which I have found it to exist in two other species, *Helix tridentata* and *Helix alternata*, and I have no doubt of its existence in others, not yet having had an opportunity of examining further. As there appears to be no known genus in which this animal can be placed, I have been necessitated to form the following :---

Cryptobia. Animal minute; form exceedingly proteoid; internal organization cellular or granular.

C. helicis. Colourless; form ordinarily elongate, ellipsoid, fusiform or ovate; caudated, caudæ opposite, one longer than the other. Internal granular structure consisting of two large cells and numerous minute granules. Total length from the 125th to the 100th of Ann. & Mag. N. Hist. Vol. xix. 15